



# Single-Family Residential Water Heater Alterations

2022 Title 24 Building Energy Efficiency Standards

Is the Existing Water Heater Electric Resistance?	What type can I install prescriptively?	What can I install under the performance approach?
<b>NO</b>	<ul style="list-style-type: none"> <li>• <b>Natural gas or propane</b> — tank or tankless (§150.2[b]1Hiiiia)</li> <li>• <b>Heat pump</b> — (§150.2[b]1Hiiiib)<sup>1</sup></li> <li>• <b>Heat pump</b> — NEEA Tier 3 or higher (§150.2[b]1Hiiiic)</li> </ul>	Any type that uses no more energy than the standard design (gas or propane tankless; or heat pump, if proposed is electric). Must use CEC-approved compliance software (§150.2[b]2B)
<b>YES</b>	<b>Consumer electric or heat pump</b> — tank or tankless (§150.2[b]1Hiiid) <sup>2</sup>	Any type that uses no more energy than the standard design (heat pump). Must use CEC-approved compliance software (§150.2[b]2B)

All existing accessible and newly installed piping must be insulated per §150.2(b)1Hi.

- <sup>1</sup> Storage tank cannot be outdoors and must be on rigid, incompressible surface insulated to R-10 or higher. Must have a communications interface meeting §110.12(a) requirements or have an ANSI/CTA-2045-B communication port.**
  
- <sup>2</sup> Per 10 CFR 430.2, consumer electric water heaters include:**
  - Electric storage or instantaneous water heaters with an input of 12 kilowatts or less.**
  - Heat pump-type units, with a maximum current rating of 24 amperes, at a maximum voltage of 250 volts, designed to transfer thermal energy to heat water, including all ancillary equipment (e.g., fans, storage tanks, pumps, or controls) necessary to its function.**

**Have questions? Contact the Energy Standards Hotline at:**

(800) 772-3300 (inside California), (916) 654-5106 (outside California), [title24@energy.ca.gov](mailto:title24@energy.ca.gov)

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